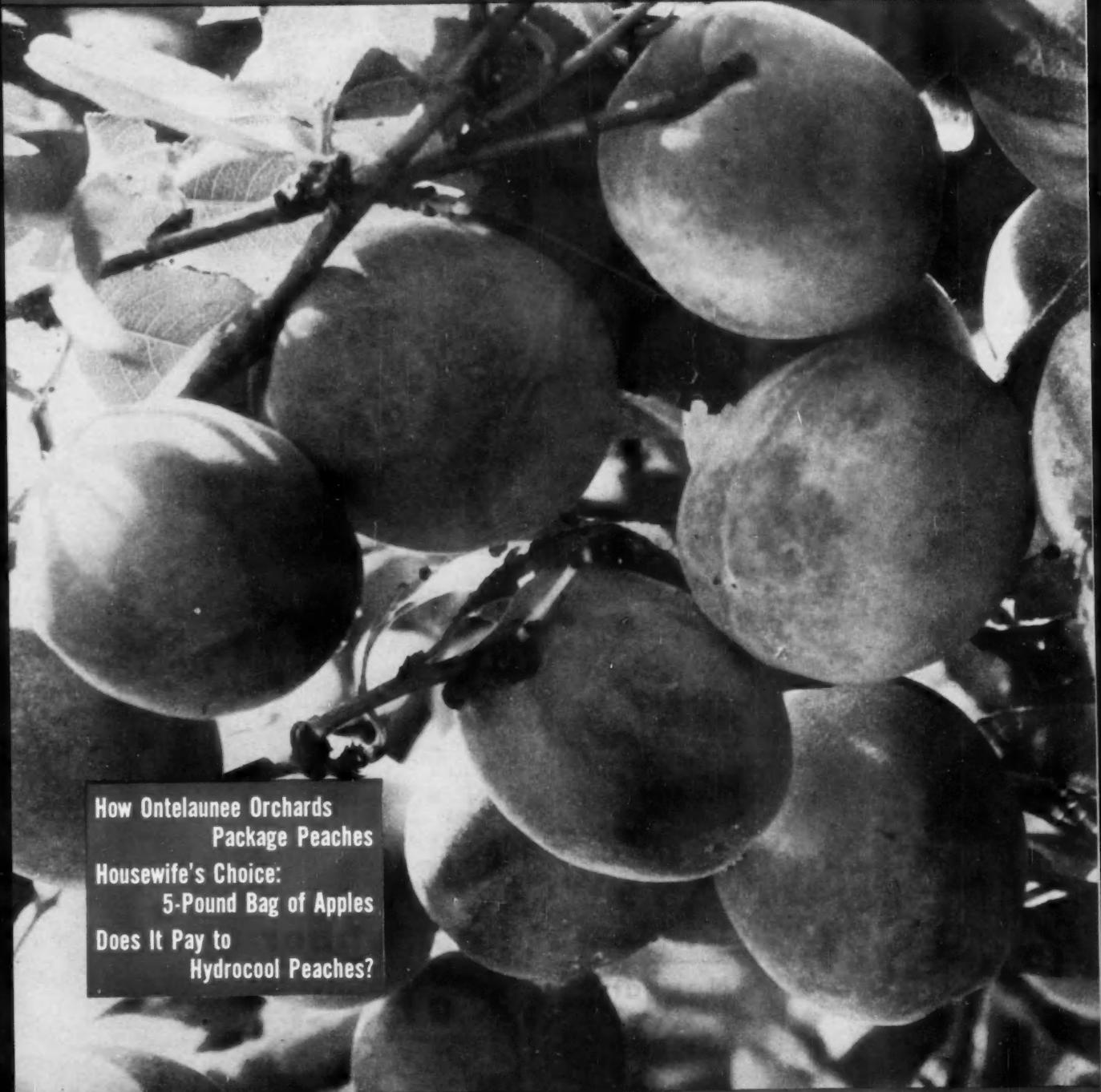


# American Fruit Grower

WESTERN EDITION

AUGUST • 1956



How Ontelaunee Orchards  
Package Peaches  
Housewife's Choice:  
5-Pound Bag of Apples  
Does It Pay to  
Hydrocool Peaches?

• Equipment and Supplies for Your Packaging Needs •

Today's safest  
best all-round

# mite killer



for better kill  
cleaner fruit  
better yields

# ARAMITE

Before mites bite, be ready with Aramite, the best and *best-known* mite killer. Protect your crops for higher yields of marketable fruit.

Aramite gives outstanding control of European Red Mite, Two-Spotted, Clover and many other mite species.

Long residual saves you costs of additional sprays. Aramite is easily applied, compatible with sulphur and many other insecticides and fungicides. Aramite does not kill natural predators.

For more than 19 fruit and vegetable non-fodder crops, including apples, the Miller Amendment (Public Law 518) has approved Aramite with a tolerance established of one part in a million.

Order your Aramite supply from your local supplier;  
write, phone or call us if he is unable to deliver.



**United States Rubber**  
**Naugatuck Chemical Division**  
**Naugatuck, Connecticut**

producers of seed protectants, fungicides, miticides, insecticides, growth retardants, herbicides: Spergon, Phygon, Aramite, Synklor, MH, Alanap, Duraset.

*Plenty of work  
this fall for*

## **CAT\*** **DIESEL** **TRACTORS!**



**DIRTMOVING**—D2 backfilling a drainage tile ditch at the Sodus Fruit Farm, Inc., Sodus, New York. They report, "Our orchard improvement program is dependent on the D2. We use it for all the tough jobs!"



**DEEP TILLAGE**—On the Layman Bros. orchard, Daleville, Virginia, a D2 breaks hardpan to increase moisture penetration, and makes re-planting easier.

After the fruit is off—while wheel-type tractors sit idle waiting for next season, you'll always find profitable jobs for a Cat Diesel Orchard Tractor! For example, you can:

- Doze out dead or filler trees
- Clean up around your orchard
- Form or level your land
- Dig drainage or irrigation ditches
- Subsoil or deep till
- Excavate and backfill for buildings
- Remove snow
- Do general farm and orchard work
- Handle jobs too tough for wheel-type tractors
- Do custom work

Think how much more profitable your orchard can become—how much better prepared *you'll* be for spring work by doing these jobs—and many more—this fall! Think of the extra income you can make by doing custom work for your neighbors who need many of these jobs done, too—but can't with limited-duty tractors.

*You can* when you become a Cat D2 or D4 Tractor owner! More than 10 sq. ft. of ground-gripping steel track and a powerful diesel engine say you can... give you *twice* the workability of wheel-type tractors of similar size.

You can equip your D2 or D4 with a wide variety of direct-mounted "Swing-Around" Tool Bar equipment including bulldozer, subsoilers, chisels, cultivators, disk ridgers and many others. But for the complete story, and a convincing demonstration, see your Caterpillar Dealer today! No obligation, of course.

CATERPILLAR TRACTOR CO., Peoria, Illinois, U.S.A.

**A FREE ORCHARD POWER ANALYSIS** and a demonstration will be made by your Caterpillar Dealer to help you determine the most efficient tractor for your orchard—just call him. Ask him for a copy of "Tires or Tracks" or write us at Dept. AMF86.



**CATERPILLAR**®

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**DIESEL  
ORCHARD TRACTORS  
TOOL BARS • TOOLS**

Wherever they use

# ORTHOCLIDE

(caption)

## they always talk about PROFITS



### WISCONSIN:

**Apples—"25¢ more per bushel!"**—Mr. and Mrs. Marshall Hall (above) of Hall Enterprises, Casco, Wisconsin, used the complete ORTHOCIDE Program. Biggest previous yield was 18,000 boxes. This year it was 35,000 boxes. Says Mr. Hall: "We sold apples where others couldn't, and at prices higher than quoted from other sources—at least 25¢ more per bushel. Finish was superior to any I've ever had. Insect and scab control was excellent."

### ILLINOIS:

**Strawberries—15 pickings instead of 2**—Claud Boyd (pictured) of J. J. Boyd and Sons, Cobden, Illinois, says ORTHOCIDE gave them 15 pickings instead of 2 because of protection from Botrytis rot. Used ORTHOCIDE on all varieties—Klonmore, Tennessee Beauties, Blakemore, Armore and Temple. Got better size and color, in addition to increased yield. Plants also produced longer than untreated acreage of former years.



Here's why ORTHOCIDE  
gives finer fruit finish, bigger yields,  
better keeping qualities and outstanding disease control

1. ORTHOCIDE is backed by ORTHO field research and serviced by trained ORTHO Fieldmen.
2. ORTHOCIDE is a top quality formulation of the chemical captan, made by the original developers and formulators.

3. Has better sticking, wetting and spreading agents and superior carrying agents.
4. ORTHOCIDE is compatible with the full ORTHO line of insect and disease control products and is specially designed and tailored to fit ORTHO programs.

T.M.'S REG. U.S. PAT. OFF.  
ORTHO, ORTHOCIDE.



ON ALL CHEMICALS, READ  
DIRECTIONS AND CAUTIONS BEFORE USE.

For best results ORTHOCIDE should be used in a complete ORTHO spray program as recommended by our research and the ORTHO Fieldman.

#### California Spray-Chemical Corp.

Executive Offices: Richmond, Calif., Washington, D. C.

District Offices: Milwaukee, Wis.; Sacramento, San Jose, Fresno, Whittier, Calif.; Phoenix, Ariz.; Caldwell, Idaho; Maryland Heights, Mo.; Shreveport, La.; Memphis, Tenn.; Maumee, Ohio; Haddonfield, N. J.; Medina, N. Y.; Columbia, S. C.; Orlando, Fla.

# American Fruit Grower

REG. U. S. PAT. OFF.

The Only National Fruit Publication

Vol. 76 AUGUST, 1956 No. 8

### FEATURED IN THIS ISSUE

*Cover photograph, by J. C. Allen and Son, shows clusters of Elberta peaches. Despite its many shortcomings this variety is still the No. 1 peach in the U. S.*

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### AMERICAN FRUIT GROWER

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E. G. K. MEISTER,  
Publisher

RICHARD T. MEISTER, Editor

Editorial Staff

E. K. GOULD, Managing Editor

H. B. TUKEY ELDON S. BANTA

GEORGE M. ROSS, Art Director

J. S. BENDER, Production Manager

EDWARD L. MEISTER, Director of Advertising

District Advertising Offices

NEW YORK, Martin-Snow Co., 140 E. 46th St.

Phone—Plaza 5-0878

CHICAGO, Peck and Billingslea, Inc., 185 N.

Wabash. Phone—Dearborn 2-0292

SAN FRANCISCO, McDonald-Thompson, 625 Market St. Phone—Yukon 6-6477

LOS ANGELES, McDonald-Thompson, 3727 West 6th St. Phone—Dunkirk 7-5391

SEATTLE, McDonald-Thompson, 1008 Western Ave.

Phone—Elliot 3767

HOUSTON, McDonald-Thompson, 3217 Montrose Blvd. Phone—Jackson 9-6711

DENVER, McDonald-Thompson, 222 Colorado National Bank Bldg. Phone—Keystone 4-4669

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AMERICAN FRUIT GROWER



*The new "Two-Ten" 2-Door Sedan with Body by Fisher, one of 20 frisky new Chevrolet models.*

**"Here already?**

*...that new Chevy of yours must really move!"*

Don't be surprised if you hear comments like that when you go calling in a new Chevrolet. For this low-swung beauty is a mighty tall traveler!

You just naturally seem to get where you're going sooner in a Chevy. And the best part is, you get a bigger kick out of the trip. *Any* trip.

That's what comes of driving one of the few great road cars built today. A car with big, deep-breathing power (ranging up to 225 h.p.!) that handles steep hills without half trying. A car with hair-trigger acceleration that makes passing seconds safer! A car that's built and balanced to give you a solid sureness of control on any road.

You've a whole summer of sunny driving days ahead to make the most of. And Chevy's just the car to help you do it. See your Chevrolet dealer. . . . Chevrolet Division of General Motors, Detroit 2, Michigan.



## NIAGARA "NO FROST"

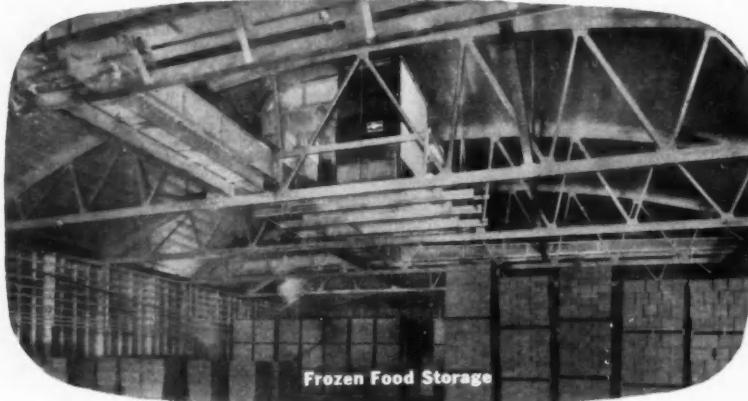
25 Years Successful Experience

★ Never any defrosting shutdown



Citrus Concentrate Freezing and Storage

★ Never a rise in temperature



Frozen Food Storage

★ Save Power... Reduce Costs



Citrus Juice Concentrate Freezing

Write for Niagara Bulletin 105

**NIAGARA BLOWER COMPANY**

Dept. F.V. 405 Lexington Ave.

New York 17, N. Y.

District Engineers in Principal Cities of U. S. and Canada

## LETTERS TO THE EDITOR

### Quality or Condition?

Dear Editor:

Which is it, quality or condition? In the June issue of AMERICAN FRUIT GROWER, T. S. Weir takes issue with John A. Logan. Mr. Logan says the chains buy apples on "quality." ("Thinking of Selling to the Chains?" Sept., 1955 AMERICAN FRUIT GROWER.) Mr. Weir says he (Mr. Logan) probably means "condition," and defines quality as meaning "sweet or sour, dry or juicy or yummy." According to Webster, quality might mean "yummy," but not "sweet or sour, dry or juicy." A Stayman is a sour apple. It may be a well-colored, high-quality apple or it may be a green, starchy apple of low quality. Either apple may have been handled roughly and reach the merchant in bad condition.

Castlewood, Va.

B. C. White

White's Orchards

### Bee Damage

Dear Editor:

In a recent issue you state that bees and hornets seldom, if ever, initiate damage to grapes.

We do not have hornets here but bees will use their mandibles to break the skins on the Portland variety as the skin is very tender and the juice is very sweet. They will also attack Catawba after the Portland is gone. In the same vineyard, they hardly bother the Fredonia, Concord, and Sheridan, unless punctured by birds. Nor do they bother Golden Muscat as it has a very tough skin.

Farmington, Mo.

E. Longenecker

### French Walnut Variety

Dear Editor:

In a recent issue M. P. Adams says that his Manregian Walnut has been judged best at the Oregon State College. May I suggest testing one more?

About 25 years ago I found a tree in Tehama County, Calif., which, in a row of California Blacks, was by far the largest in diameter and spread. I sent a few nuts to our nut specialist who said that he did not recognize it as a U. S. variety but had seen it in France, near Grenoble.

The seedlings I have grown from this tree have developed much faster than all the Blacks, hybrids included. The nut has a soft shell and is of good quality, but rather small for the market. The leaf is like the English Walnut but the bark is much like the California Black.

We all know that English Walnut seedlings do not live long in this state, but the "Grenoble" was more than three feet in diameter when I saw it and probably close to 100 years old. I think it is worth trying.

Newcastle, Calif.

A. Lafarge

### DDT for Peach Borer

Dear Editor:

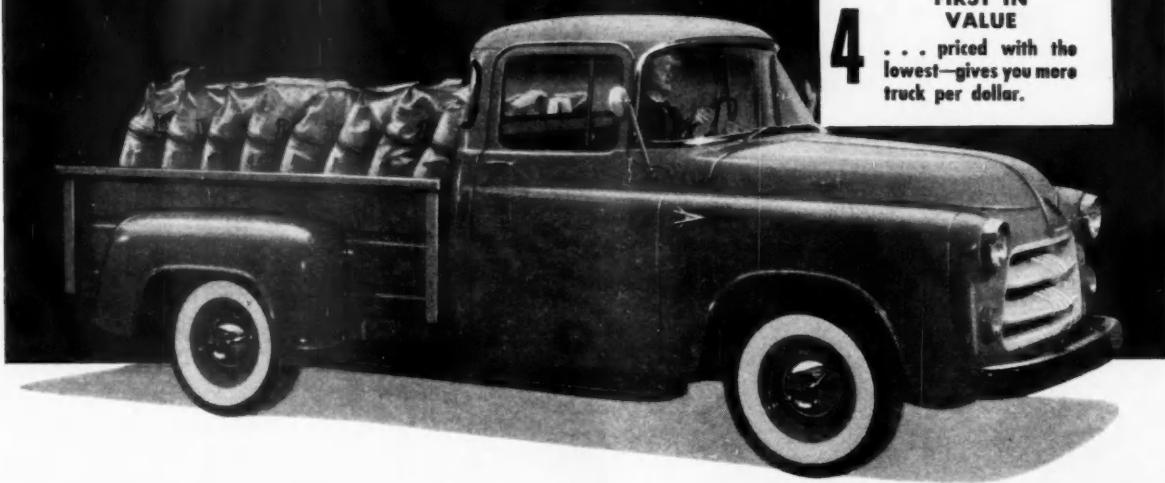
As a subscriber to AMERICAN FRUIT GROWER, I have read a great deal about controls for the peach borer. I tried practically all of them, and finally in desperation I tried a 50 per cent DDT spray. I sprayed the trunk and the base of each tree and finally licked the borer.

Maple Heights, Ohio

R. Moebius

DDT sprays are recommended practice, but proper timing is all-important for success.—Ed.

# Choose the pick-up that's first in all 4... DODGE



## Test-drive DODGE before you decide...

You're taking a big chance when you "habit-buy" a new truck . . . that is, buy the same old make without checking all *Dodge* has to offer.

This time, take a long, careful look *before* you decide. See for yourself how much more *Dodge* gives you!

- **Greater gas economy.** Exclusive, short-stroke Power-Dome V-8 design gives you full power on *regular* gas . . . more miles per gallon.
- **Low engine maintenance.** Advanced Chrysler-

engineered Dodge combustion-chamber design practically eliminates harmful carbon deposits, cuts upkeep costs to the bone.

● **Complete sheet metal protection.** All metal surfaces, hidden *unpainted* surfaces included, are specially treated to resist rust and corrosion. Cabs and bodies last longer.

● **Low prices.** Many *Dodge* models actually cost *less* than any other make.

You get *more truck* for your money in a *Dodge*. See your *Dodge* dealer and let him *prove* it!

# DODGE TRUCKS

WITH THE  
FORWARD LOOK 

GET YOUR DODGE DEALER'S DEAL BEFORE YOU DECIDE!

# Want to SELL MORE PEACHES?

We hope this will help!

There is real economy in canning peaches at home. But too many housewives do not realize this.

So Ball Brothers Company, the leading manufacturer of home-canning supplies, prepared this "Quick Cost Estimator" to visualize the savings.

Displayed in fruit stands or store produce departments next to your peaches, this "Estimator" can induce shoppers to buy extra bushels for canning.

Offer to stores with your peaches—and urge them to run specials on "Peaches for Home Canning." They'll reap bigger profits, and so will you!



**SAVE!** with HOME-CANNED PEACHES

## QUICK COST ESTIMATOR

PEACHES PER BUSHL.	QTS. FROM BUSHL. (A)	PEACH COST, QT.	SUGAR COST, QT.	JAR & FUEL PER QT. (B)	HOME-CANNED PEACHES, QT. (C)
\$1.00	20	5¢	3¢	3¢	11¢
\$1.50	20	7½¢	3¢	3¢	13½¢
\$2.00	20	10¢	3¢	3¢	16¢
\$2.25	20	11¼¢	3¢	3¢	17¼¢
\$2.50	20	12½¢	3¢	3¢	18½¢
\$2.75	20	13¾¢	3¢	3¢	19¾¢
\$3.00	20	15¢	3¢	3¢	21¢
\$3.25	20	16¼¢	3¢	3¢	22¼¢
\$3.50	20	17½¢	3¢	3¢	23½¢
\$3.75	20	18¾¢	3¢	3¢	24¾¢
\$4.00	20	20¢	3¢	3¢	26¢

NOTES: (A) Yield is generally 18-24 quarts of home-canned peaches per bushel. (B) Cost per jar based on 10-piece line, plus replacement lids; average cost per quart is 10¢. Add 10¢ for envelopes 1½ oz. (C) Quarts per bushel approximately 10% more than 2½ qt. Add 10% to price of 12½ qt. of peaches to compute cost with 1 quart of home canned.

PROTECT FLAVOR BEST WITH  
CREAM-WHITE ENAMEL LINING of



Write today for the quantity you can use. We'll be happy to send them FREE. Address Ball Brothers Company, Box 729, Muncie, Indiana. Your "Estimator" cards will be sent postpaid . . . with our best wishes for a profitable peach harvest.

# American Fruit Grower

• Fruit for Health •



Brushed and graded peaches at Ontelaunee Orchards are placed by hand in corrugated tray-pack box. A 25-pound carton is also used. Changeover from baskets to cartons was discussed with buyers, to sell them on the idea.

## 'We Got Rid of Our BUSHEL BASKETS!'

**Now Ontelaunee Orchards market their quality peaches in cartons, net more profit than from old, low-cost baskets**

By R. T. MEISTER  
*Editor*

**F**IVE years ago Ontelaunee Orchards, at Leesport, Pa., stopped using bushel baskets.

It kept its stock of 2500 baskets around the packing shed, though, thinking, as sales manager John Mengel related it during the Illinois State Horticultural Society Convention, "Well now, this year we will pack a few of these baskets and get rid of them, and every year it came to the point, what are you going to sacrifice, the baskets or the price and quality of the peaches? So this year we finally got smart and sold all those baskets to an apple packer down in Virginia. We got rid of them, and we're happy!"

This refusal to compromise on quality is typical of Ontelaunee Orchards. The big, 1600-acre operation has a reputation for quality peaches which consistently top the eastern markets where they are sold. Last year, when the Pennsylvania average gross price for peaches was

about \$2.15 a bushel, Ontelaunee chalked up an all-time high gross price of \$3.71 a bushel. And in the last six years, its gross price on peaches hasn't dropped below \$3.18!

Peaches are grown to perfection at Ontelaunee's 150-acre irrigated peach orchard—but that doesn't entirely explain their success in the marketplace. The peaches are also packed to perfection—with what Mengel calls "the care that good peaches deserve."

The entire picking and packing operation is geared to the highest quality standards. Peaches are picked, packed, and shipped *every day* during the season. This has not proved as expensive as it sounds; it makes for a uniform flow, and assures the buyers of peaches picked at their peak of perfection.

Last season 17 individual pickings were made of Redhaven; 14 of Raritan Rose; 10 of Jubilee; 13 of Triogem; 8 of Halehaven; 5 of Red Rose; 11 of Summercrest; 8 of White Hale; 15 of Elberta, and 9 of Brackett.

"Many growers may feel that our picking costs are too high, but our returns are likewise high in volume and price," Mengel says.

"In 1953, during a severe drought when our crop shrunk on account of size, it cost us approximately \$1.00 per bushel to pick, and this was high.

"However, in 1955 from the same number of trees we took almost double the number of peaches, and it cost only 43 cents per bushel to pick and transport to our packing house floor. In this picking cost is also the matter of picking up drops and carting them out of the orchard for destruction, as a sanitary measure, and that was done frequently."

Ontelaunee is not interested in peaches smaller than  $2\frac{1}{4}$  inches; irrigation and thinning give this size.

Peaches are picked as nearly tree-ripe as possible in  $5\frac{1}{2}$  baskets and taken to the packing house in these baskets. This prevents further bruising that would occur in transferring them to field boxes. Also the  $5\frac{1}{2}$

*(Continued on page 29)*

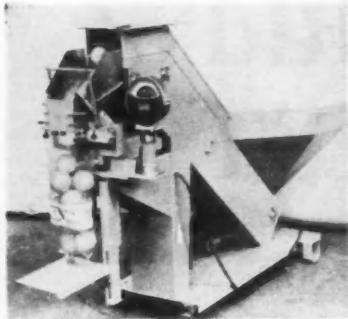


Two-piece face and fill corrugated carton with side handles comes in  $\frac{1}{2}$ - and 1-bushel sides. Made by Fruit & Produce Packing Co., 700 W. Morris St., Indianapolis 6, Ind.

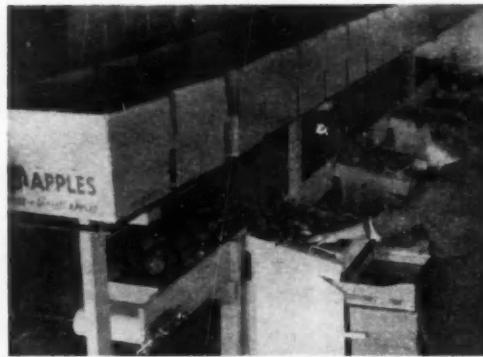


Made of molded pulp, Kys-Pak trays "cradle" each apple, prevent bruising. Made by Keyes Fibre Sales Corp., 420 Lexington, New York 17, for corrugated, wood, or wirebound containers.

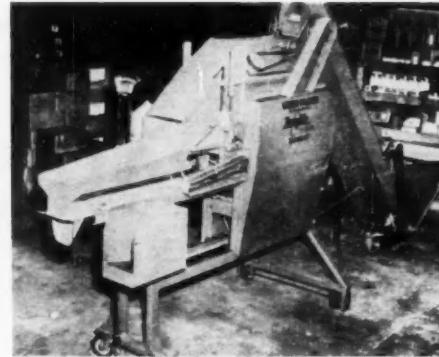
## To Help You With Your PACKAGING NEEDS



Portable, single-station bagger is made by Florida Division, Food Machinery and Chemical Corp., Lakeland, Fla.



Speedi Float-Packer tray-packs apples mechanically. Trays are filled automatically and lowered into carton on cushion of air. Fruit Industries Research Foundation, Yakima, Wash.



Portable WEIGH-PACKER automatically bags 3- through 15-pound units of produce. The Aeroglide Corp., P. O. Box 1839, Raleigh, N.C.



Complete prepackaging line is made by Trescott Company, Inc., Fairport, N.Y. Features fast, gentle Autodump, roller grader, two-way reverse flow belt, Autobagger, take-away belt, bag closing machine, and carton packer. Handles the entire job from start to finish.



P-37 model bag sealer seals bags under 10 pounds. Minnesota Mining & Manufacturing Co., 900 Fauquier Ave., St. Paul 6, Minn.



Kwik Lok closes plastic bags quickly, neatly, securely. Made by Kwik Lok Corp., Yakima, Wash.



NIKE Bag Sealer seals plastic bags in one motion. Better Packages, Inc., Shelton, Conn.

Model BSF—Combination foot-operated stapling machine handles any container stapling job. Container Stapling Corp., P. O. Box 247, Herrin, Ill.

# BYRD APPLES...

## and MRS. HOUSEWIFE

**The Nation's No. 1 Apple Grower—after a 50-year sales record—will now direct his advertising appeal to the consumer**

By JAMES F. LAISE

A NEW field has been added to the very complicated and complex job of growing apples—merchandising.

The H. F. Byrd orchards, of Winchester, Va., now celebrating their 50th year of producing apples, had experienced just about everything, even hurricanes, in producing and marketing apple crops until 1953.

It was during this year that the management discovered that "something had to be added" to the usual program of producing and packaging high quality apples associated with the Byrd Brand for so many years.

The need was very evident—the tremendous crops that were in sight in the Byrd orchards, the increase in emphasis on merchandising and promotion in other food items during recent years, and the lack of salesmanship in retail outlets occasioned by self-service.

The various apple promotional agencies were doing a good job of securing more business from Mrs. Housewife, but Byrd had a more personal problem—how to get more Byrd business from Mrs. Housewife.

The first step was to secure a field representative. His job would be exploratory at first, to determine territorial lines, to investigate markets as to their needs and desires, to outline the area or markets in which intensive



Senator Harry F. Byrd, producer of almost 2 million bushels of apples annually, is shown in above photo talking to a driver just about to be dispatched for the Southwest. At right is a point-of-sale advertising piece used by Byrd.

effort would be directed, but, most important, to strengthen the bridge between Sales Manager Arnold in Winchester and the various principals of the trade in the 23-state area covered by Byrd in their marketing.

Visitation was the chief tool, and to make the job more simple a branch office was located in Atlanta, Ga., allowing the field man to "live with the trade." Visits were made with personnel in all aspects of the trade—broker, jobber, service-wholesaler, and retailer. Friendly conversations

with the boy behind the produce rack was not overlooked whenever possible, and even visits with Mrs. Consumer at her club meetings, on the street, and in her home.

"Gimmicks," remembrance advertising, was used in a great many ways as well as sales meetings with the trade in their own backyard, usually with some member of the Byrd family present to lend color.

Another advantage of the "field man" is to render the dealers a service just not possible via the telephone, such as the supply of information, inspections, explanations, and even assistance in sales.

But, time was not always available and the territory too large for adequate visitation. So it was that Trade Advertising came to the rescue. To augment the visitation program a planned advertising program in trade journals and various trade publica-

(Continued on page 29)



B. Beverley Byrd (left), the Senator's son and manager of his orchards, looks at some typical consumer advertising with Jim Laise, the Byrd field representative.

# HYDROCOOLING Peaches

- What does it cost?
- Will it be worth it for you?
- Can you market your peaches without it?

By G. W. SCHNEIDER  
*North Carolina State College*

**T**HREE has been a rapid trend toward hydrocooling peaches in many peach-producing areas.

Growers without cooling equipment are trying to decide if they should make this investment. The answer should be determined by estimating costs and possible increase in returns, if any, from hydrocooling.

An important factor that will influence the answer to this question is, "Can you sell your fruit on central markets if it is not cooled?" If you cannot sell noncooled fruit you may have to hydrocool even though the premium does not offset the costs of cooling.

What effect does hydrocooling have on the fruit? One of the most striking effects of cooling found in a 1954 North Carolina study was the development of yellow ground color.

Hydrocooled fruit held at 60° F. or at room temperature developed a greater amount and a very much more attractive bright yellow ground color than noncooled fruit from the same orchards. This response was observed on Dixigem, Golden Jubilee, and Elberta, even though at least part of the fruit was not especially mature when harvested. Hydrocooled fruit held at lower temperatures showed this same response, but to a lesser extent.

In North Carolina in 1954 hydrocooling did not have a consistent effect on rot development on the fruit. The trend suggested that hydrocooled fruit held at 60° F. developed less rot. This was not consistent and not necessarily a real difference in favor of hydrocooling. Other workers have also found varying response to hydrocooling. Rapid removal of field heat slows down ripening processes and would prolong shelf life of peaches if rot were not limiting the storage life of the fruit.

How much will it cost to hydrocool your peaches? Results of a study in North Carolina in 1954 may help to answer this question. The installation cost will include the



Hydrocooled peaches at Sunny Slope Orchard, Candor, N.C., get a lift to storage from grower W. C. Capel (left) and H. Taylor. Cost of hydrocooling decreases as volume of peaches increases.

cost of the cooler and may also include: 1) extra conveyors, motors, turns, and belts, 2) ice crusher, 3) ice storage house, and 4) possible expansion of the packing house.

Depreciation of the equipment, interest on the investment, insurance, and taxes make up what might be called fixed annual costs of hydrocooling. Once the hydrocooler is

Items 2 and 3 are usually of such minor cost that they can be largely disregarded in computing cost per bushel. Extra labor may amount to about three extra men; one to put the peaches in the machine, one to take them off, and one to ice the machine.

Largest single variable cost was ice, estimated to vary from about 31 cents per bushel for cooling a total of 1,000 bushels during the season to 8.6 cents per bushel when 20,000 bushels per year were cooled. This large difference in ice cost was due to the amount of ice required to cool the water in the cooler before starting to cool fruit each day.

It was estimated that it required slightly more than a ton of ice to cool the water in a 25-foot cooler before any fruit was cooled. This, of course, is affected by prevailing temperatures. It was also estimated that cooling each bushel of peaches 35° F. (from 85° to 50° F.) required about 21 pounds of ice.

Since volume has such a large effect on cost of cooling a bushel of fruit, the smaller grower should consider arrangements for cooling other than owning his own equipment.

Alternatives are 1) going in with other growers on a co-operative arrangement, 2) having his fruit custom-cooled, or 3) selling his fruit to other growers for packing and cooling.

THE END

Estimated Total Costs of Hydrocooling Peaches in 1954 With a 25-foot Cooler in North Carolina\*

Number of Bushels Cooled Per Year	Total Cost Per Bushel
1,000	\$1.25
5,000	.32
10,000	.21
15,000	.17
20,000	.15
30,000	.13

\*Data from *Hydrocooling Peaches*, Mimeoographed Information Series 39, North Carolina Agricultural Experiment Station, Raleigh.

installed, these costs continue rather constant. Thus, the greater the volume of fruit cooled, the lower the fixed cost per bushel.

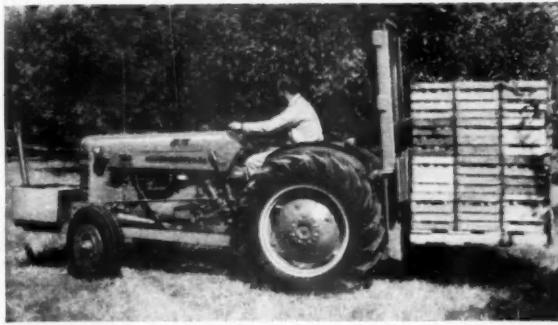
It was estimated in 1954 that fixed costs for a 25-foot cooler varied from 93 cents per bushel where only 1,000 bushels were cooled per year to about 5 cents per bushel when 20,000 bushels were cooled.

The variable costs of hydrocooling include 1) extra labor to ice the machine and to handle the fruit at the cooler, 2) power, 3) hypochlorite, and 4) ice to cool the water.



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# NEWS

## • Hudson Valley Growers Take Steps to Do Something About the Weather • "You Have a Wide-Open Market for Strawberries," Ohio Growers Are Told

### No More Hail?

NEW YORK—A force of 260 Hudson Valley fruit growers have united as the Hudson Valley Crop Services, Inc., and are taking steps to do something about the weather. A total of \$27,000 has been pledged so far to finance what is expected to be a \$60,000 campaign to prevent hail damage to crops.

Here to direct the campaign is Charles A. O'Hanlon, president of Weather Modification Company, San Jose, Calif.

Propane gas cylinders and generators will spray silver iodide into the air. Radar will scan the horizon for 90 miles searching for storm clouds. A modified P-40 pursuit plane will seed clouds from above, and rain rather than hail will fall.

Last year hail damaged 15% of the fruit crops in this 1000-square mile area; two years ago the damage reached 75%.

Walter Schreiber, Red Hook, president of the growers' group, says each grower is charged \$4 per acre, in comparison to costs of \$18 to \$21 an acre for hail insurance.—George E. Toles.

### The Medfly and Citrus

FLORIDA—Some 1500 growers jammed the sessions of Florida Citrus Mutual's recent annual convention, establishing a new attendance record. Major topic of discussion: eradication of the destructive Mediterranean fruit fly.

Many of the growers present at the meeting had gone through the 1929 cam-

paign to eradicate the fly in its first attack on the North American continent, and the Medfly's second appearance in Florida was cause for general alarm.

The value of Florida's citrus crop alone justifies almost any cost to eliminate this menace, growers at the meeting were told. Final figures are not yet available on the 1955-56 crop, but it will probably run around \$150 million on the tree for oranges, grapefruit, and tangerines.

Mutual's general manager, Robert W. Rutledge, had an optimistic report for the growers. He forecast that the 1956-57 season would be a "good one, even compared with this season."—N. F. Lavigne, Director, Press Relations Div., Lakeland.

### Traveler Stricken

MINNESOTA—Prof. J. D. Winter, secretary, Minnesota Fruit Growers' Association, is convalescing satisfactorily at Asbury Hospital in Minneapolis after becoming ill in Canada at the completion of his tour of Europe and Canada.—Thomas T. Aamodt, State Department of Agriculture.

### Strawberries—A Superb Product!

OHIO—The merits of small fruits and strawberries in particular were extolled at a special field day in June at the Ohio Agricultural Experiment station, Wooster.

W. Lee Allen, noted strawberry nurseryman of Salisbury, Md., was a featured speaker. It is his opinion that there is a wide-open market for fresh strawberries near the big industrial centers in Ohio. Every year thousands of potential consumers fail to get all the strawberries they want just because not enough are grown locally, he stated.

The Maryland nurseryman described the intensive project his firm carries on in producing virus-free and disease-resistant plants for the trade. In his opinion the variety Catskill is the most promising now on the market.

County Agent Harold S. Ward expressed the opinion that not enough people are aware of the fact that strawberries are an excellent source of vitamins A and C, also calcium and iron. In addition they are low in calories.

Over-abundant rain in May and June contributed to a poor set of apples and also promoted heavy scab infection.

T. H. Parks, state extension entomologist, retired on June 1. Parks, a native of Circleville, joined the extension service in 1918.—C. W. Ellenwood, Sec'y, Wooster.

### Harvest News

NEW JERSEY—Blueberry harvest was far below normal for late June and early July. The freeze of May 24 reduced the crop from one-fourth to one-third that of 1955. The Blueray variety shows both freeze and drought resistance. Earliblue should supersede on size, color, dessert quality, and vigor of plant.

Strawberry harvest was poorest in 10 years for some growers hurt by the freeze; (Continued on page 22)

## FRUIT PEST HANDBOOK

(FIFTY-SECOND OF A SERIES)

### RED-BANDED LEAF ROLLER

THE red-banded leaf roller is one of the more serious pests of apples, and to some extent a pest of peaches, in the region from Colorado to the eastern seaboard and from Canada south to North Carolina and Tennessee.

Injury is caused by the feeding of the larvae on foliage and fruit. On the foliage feeding is on the underside along the midrib, main veins, and where a leaf touches a fruit. On the fruit the skin is eaten in the stem end and along the sides, particularly where it touches a leaf, twig, or another fruit, in small, irregular, shallow channels slightly below the fruit surface.

The insect overwinters as a pupa beneath fallen leaves and other debris on the ground. The moths emerge in the spring about the time the buds on the fruit trees are breaking. The moths lay two or three masses of 25 to 40 eggs each on the larger, smooth-barked limbs. Hatching is usually completed by the time of petal fall of apples.

There are two generations in the northern portion of the infested area, and three and sometimes a partial fourth generation in the southern portion. In the northern area first-generation larvae feed through June, and second-generation larvae appear during August and may continue to feed until after harvest.

In the southern area feeding may be continuous from bloom until after harvest due to an overlapping of generations. The first generation may be present from bloom until mid-June, the second from late June until early August, and the third from early August until cold weather. The partial fourth, when it occurs, appears in September and feeds until cold weather.

The larvae feed mostly on the foliage in the early part of the season and more and more on the fruit as the season advances.

Control. On peaches the regular parathion spray schedule for the plum curculio usually gives control. If it does not, add 1 1/2 pounds of 50% TDE wettable powder to each 100 gallons of spray when the leaf rollers become active, but not later than 21 days before harvest.

On apples use 1 1/2 pounds of 50% TDE, or 1 pound of 15% parathion wettable powder, or 3 pounds of lead arsenate per 100 gallons of spray in the calyx and/or first cover spray, depending on the degree of infestation, and TDE or parathion at the above rates in the fifth cover. Do not apply

TDE later than 40 days or parathion later than 14 days before harvest. Do not use parathion on McIntosh or related varieties. Follow all cautions given on the parathion label.—Howard Baker, USDA.



Adult of the red-banded leaf roller.



Red-banded leaf roller feeding on apple at place where a leaf touches the fruit.



Display of 5-pound bags of apples in Rochester, N.Y., supermarket during survey. McIntosh were priced at 59 cents, Red Delicious at 75 cents, Rome at 65 cents. All were New York state apples.

## Housewife's Choice: FIVE-POUND Bags for Apples

Sales of 5-pound bags of apples top 3-pound bags by 24% in new Cornell survey

RESULTS of a new Cornell University merchandising survey on apples are expected to reverse the current practice of prepackaging apples in 3-pound bags. Mrs. Housewife has indicated a clear preference for a 5-pound bag.

The survey was conducted in four Loblaw supermarkets in Rochester, N.Y., in February and March. In charge of the project was merchandising expert Max E. Brunk.

Varieties included McIntosh, Red Delicious, and Rome, both Red Rome and Rome Beauty. All were New York state apples, graded U.S. No. 1, and sized at  $2\frac{1}{4}$  inches and up. Packaging was done daily at the stores.

Price per pound was the same on both the 3- and 5-pound units. Display was kept consistent for all varieties and units, and a system of rotation insured that no variety or package would gain an advantage from position.

### 24% More Sales

Sales of unprinted 5-pound bags were 24% greater than sales of unprinted 3-pound bags. This increase is regarded as highly significant. According to Brunk, there is less than one possibility in 100 that the difference was due to chance factors.

These results upset popular notion of retailers that apples sell best when priced at 29- and 39-cent units. The 5-pound bags were priced from 59 to 75 cents, while the 3-pound bags were priced at 35 to 45 cents.

The researchers also discovered that there is no great advantage in combination displays. When two 3-pound bags were priced as a unit with a 1-cent savings, sales were only 5.3% greater than those of individually priced 3-pound bags. This was not regarded as significant.

The survey also shed light on another packaging puzzler: namely, do printed bags increase sales?

For a complete report on this survey, write to the Department of Agricultural Economics, Cornell University, Ithaca, N.Y., and ask for A.E. Bulletin 1027, "Merchandising Prepackaged Apples," by Dana G. Dalrymple.

Sales of printed bags were 3.2% less than sales of unprinted bags of the same size. While this response may have been due to chance, Brunk pointed out that if printed bags result in lower sales, growers will not profit by using them. They save the nuisance of inserting cards in the bags, but also create an inventory problem, because bags for different varieties must be kept in stock. Also, the printing on the bag may obscure the fruit.

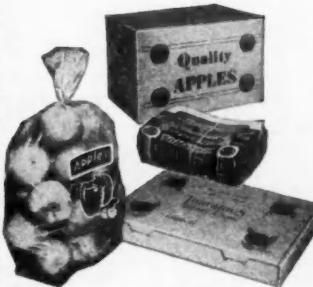
**N**UT growers who would like to try their hand at "Blight Resistant Chestnuts" should get a copy of Circular 192 from the Connecticut Agricultural Experiment Station, New Haven. Written by Hans Nienstaedt and Arthur H. Graves, the illustrated circular deals chiefly with the culture and care of chestnuts.

## F&P CONTAINERS and Packing Materials

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Crate Liners • Ring Pack  
Equipment • Box Cushions  
Box Liners • Shredded  
Cellophane • Consumer Tray  
Packages • Chip Box Liners  
Box Caps • Basket Cushions  
Polyethylene Bags • Basket  
Caps • Corrugated Vegetable  
Packages • Basket Liners  
Fruit Wraps • Wenatchee  
Fruit Picking Bags



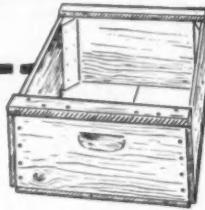
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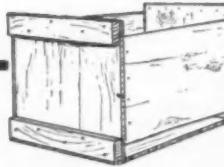
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16

## Will Uncle Sam

## Seize YOUR FRUIT?

Here's how the government decides when spray residues go out-of-bounds

By ARTHUR E. MITCHELL

Chairman, Committee on Residue Tolerances  
American Pomological Society

AS harvest approaches, the fruit grower is somewhat uncertain regarding the pesticide chemicals to use in order not to exceed the residue tolerances established under the Miller Bill.

Of course, a good rule is always to use each chemical according to the directions given on the package. However, some directions are vague and do not include information regarding the possibilities of excessive residues on harvested fruit, particularly when several chemicals are included in the same spray schedule. A good deal of this uncertainty may be clarified by a fuller interpretation of how residues are determined.

The pesticide chemicals most commonly used on fruits for which tolerances have been established have been divided into specific groups such as chlorinated hydrocarbons, organic phosphates, carbamate compounds, unrelated materials, and chemicals not restricted, that is, free of any residue tolerance. For clarity the most widely used materials may be classified as follows:

**Chlorinated hydrocarbons**—DDT, DDD (TDE), dieldrin, methoxychlor, BHC, lindane, aramite and ovex.

**Organic phosphates**—parathion, malathion, TEPP, demeton (Systox), and EPN 300.

**Carbamate compounds**—ferbam, nabam, zineb, ziram, and Vancide compounds.

**Unrelated compounds**—lead arsenate, nicotine sulfate, captan, glyodin, and actidione.

**Chemicals which may be used without restriction**—elemental sulfur, lime sulfur, fixed copper compounds, Bordeaux, lime, zinc sulfate, ferric and ferrous sulfate, wetting and spreading agents, defoaming agents, rotenone, pyrethrum, and ryania.

### How Much Is Too Much?

It is helpful to understand the methods used to evaluate allowable residues on the harvested fruit. The procedures vary for the different types of chemicals as follows:

1) The residues of each of the *unrelated compounds* are considered separately and each compound may be present on harvested fruit up to its maximum tolerance.

2) When only one chemical of the *chlorinated hydrocarbon* group, the *organic phosphate* group, and the *carbamate* group is used along with any and all of the chemicals in the *unrelated* group or those chemicals free of tolerances, each of the chemicals may be present on the harvested fruit as residue, up to the amount of its maximum tolerance.

3) When two or more chemicals of the same group are used during the season, such as DDT and DDD, both *chlorinated hydrocarbons*, the combined residues of both of these compounds are considered to be that of the one having the lowest allowable tolerance. In this case it is 7 ppm (parts per million). This occurs when the materials cannot be distinguished chemically from one another on the harvested fruit.

Thus, it is important not to use combinations of undistinguishable chemicals of the same group too close to harvest. This was described very nicely by Howard Baker in his article, "The Battle Against Orchard Insects," AMERICAN FRUIT GROWER, February, 1956, page 15.

4) In contrast, when the residues of two or more chemicals of the same group are distinguishable, the allowable residues are determined on a percentage basis. For example, when methoxychlor and DDD are used alone (that is, not in the same spraying schedule during the growing season), the allowable residue on the harvested fruit is 14 ppm for methoxychlor and 7 ppm for DDD.

However, this is not true when both compounds are used during the season in the same spraying schedule. In this case, if the chemical analysis of the methoxychlor on the harvested fruit were found to be 7 ppm, which is 50% of the allowable residue of 14 ppm, then only 50% of the allowable residue for DDD or 3.5 ppm, would be permitted. The total percentage of the residues for distinguishable chemicals of the same group cannot exceed 100%.

For example, if the residue of  
(Continued on page 18)

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can be used as close as 72 hours before harvest on many fruit crops without fear of objectionable residues on or in the harvested crop.

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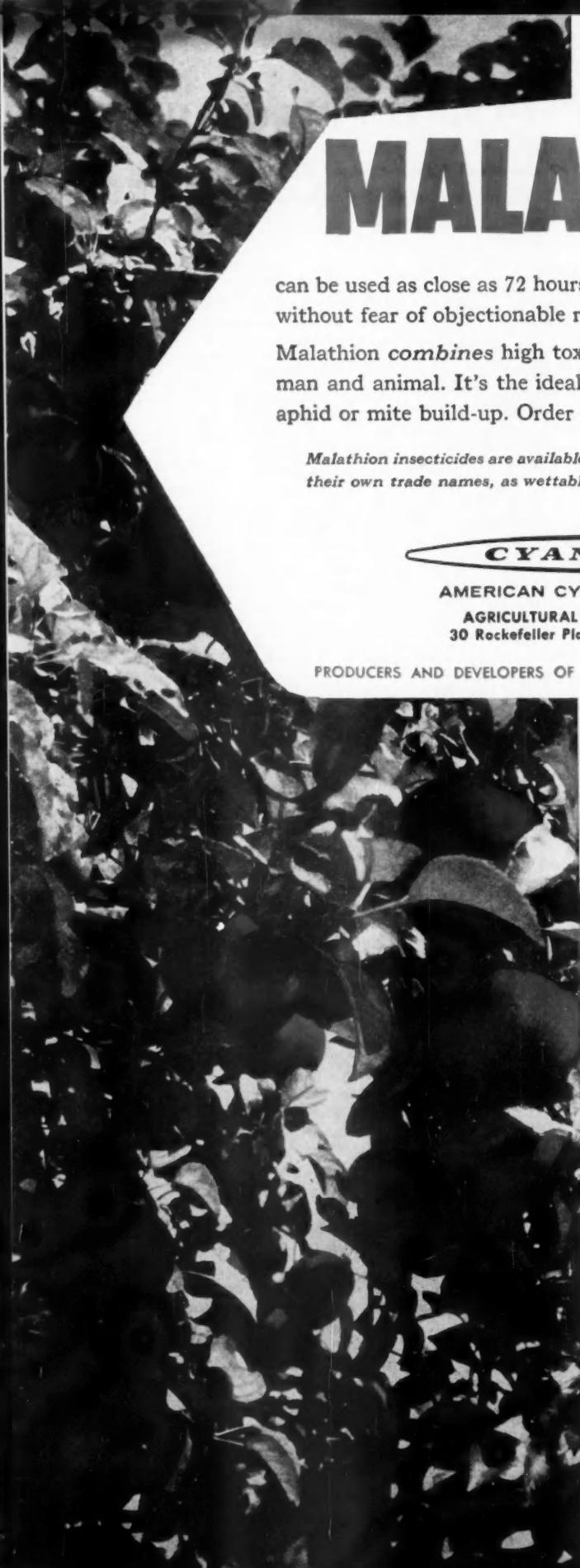
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FREE CHIPPER KIT

## THE 1956 APPLE CROP

**Smallest harvest since 1948  
is estimate of NAI delegates**

By R. T. MEISTER  
*Editor*

ESTIMATES by experienced growers from major apple-producing areas indicated that the 1956 apple harvest would be one of the smallest in the past decade.

Delegates at the National Apple Institute meeting June 12-13 in Atlantic City estimated a total crop of 84,817,000 bushels. However, a recheck by NAI in early July upped the crop to 90.5 million bushels, or about 15 million less than last year.

The July 1 USDA estimate shows 89.3 million bushels, as compared with a revised 1955 crop total of 106.3 million bushels.

On a regional basis, this year's crop in the **Western** states is estimated by NAI to be about 9.5 million bushels less than last year, or a drop to 32.4 million bushels from 41.9 million in 1955. For the **East** the 39 million bushel NAI estimate is 10 million less than last year. The **Central** area crop, the only area showing an increase this year, is estimated at 19.1 million bushels, 3.8 million more than in 1955. More than half of this increase is in Michigan, where 10 million bushels are expected as compared with 7.5 million in 1955.

### Advertising Budget Down

Because of the short total crop predicted, the consumer advertising budget of the institute will be curtailed until sufficient money is available to do an effective job.

During 1955-56, roughly \$80,000 was spent by the national promotion program. Of this, \$38,000 was used for consumer and professional advertising, \$20,000 for food page publicity, \$11,000 for promotion of the film, "Gateway to Health," \$6000 for research, and \$4000 for operating expense.

Despite the promise of good prices this fall and winter, growers expressed their determination to do all in their power to insure that marketing of this year's crop is carried out as advantageously as possible. It was pointed out that the mere fact of a small crop does not always prevent low prices.

### Crop Utilization

Estimates on the utilization of this year's crop painted an optimistic picture. Delegates estimated that 27 million bushels would be available for processing this year. This

compares with an average of 35 million bushels normally available for processors.

Three million will probably be used at home or never get to market, leaving approximately 55 million to be sold as fresh fruit. Last year it was estimated that 70 million bushels went to market as fresh fruit.

National Apple Institute officers for 1956-57 are E. B. Moore, Berryville, Va., chairman of the board; C. B. Lewis, Riverton, N. J., president; Desmond Shearer, Tieton, Wash., vice-president; Patterson Bain, McBaine, Mo., treasurer; Ralph Foreman, Northville, Mich., secretary; and Truman Nold, 726 Jackson Pl., N.W., Washington, D.C., executive secretary.

THE END.

### UNCLE SAM

*(Continued from page 16)*

methoxychlor on the harvested fruit were found to be 7 ppm and the residue of DDD were found to be 5 ppm, the total percentage of residue for both compounds would be greater than 100% (50% plus 71% for a total of 121%). This means the fruit would be subject to seizure because the total allowable residue exceeds the established tolerances.

Extension and experiment station personnel in the various states have determined the period of time that should intervene between the last application of a pesticide and harvest, to avoid excessive residues. This makes it possible to use chemicals from different groups and at the same time safely protect against injury from pests.

However, it must be remembered that some chemicals are cleared for use only on certain fruits. Thus, it is necessary to read all labels carefully to be sure each chemical is being used properly.

### Expect Changes

There is still much to be learned, and extensive research is being carried on by the chemical manufacturers and by state experiment stations in studying residues found on fruit. New information is continually being made available to the government agencies which are establishing residue tolerances for the different chemicals. Thus, we can expect frequent changes which will benefit the fruit industry without jeopardizing the consumer.

THE END.

# WINDFALLS

It is said that Isaac Newton while sitting under an apple tree was struck on the head by a falling apple. Thus he conceived the great truth of his Law of Gravitation.



By HENRY BAILEY STEVENS

IT turns out that the report of my orchard's demise was premature. Just as I was visualizing rows of ghost trees, conquered by tent caterpillars, and scab, the picture changed. A late May frost struck neighboring orchards severely, but left mine almost unscathed. I called up a grower friend who estimated that he had lost 90% of his crop.

"You'd better come over and look at these blossoms," I said. "So far as I can see, they've stood it pretty well."

He came and went back for his sprayer; and I can go on my cross-country trip more happily, knowing that the orchard is in business again even if I am not. Apparently there's nothing like forcing the trees to take some responsibility themselves.

Henry Bailey Stevens, having retired as director of extension at the University of New Hampshire, is now on a year's tour of West Coast fruit areas. Future "Windfalls" will include many of his observations.

**That Northwest Freeze** WE may have thought it was tough going in New England these years, but a letter from J. D. Hamilton of Wenatchee brings home the tragedy of last November's freeze in Washington.

"Our orchards are not pretty at all as a result," he says. "We did almost no pruning, lest we remove a bit of fruiting wood. Accordingly we got a fair bloom and a greatly better set of fruit than we had any business expecting.

"Of our 20,000 apple trees, some 10,000 are youngsters two to eight years old. Of these, 2000 were killed outright, with black dead bark from

4 inches above ground, upward a foot or two—too far to bridge-graft. These we sawed off at ground level into live cambium, and bark-grafted about every 1½ inches around the periphery of the tree. Our grafting crew surely must have kept their fingers crossed; 90% of these trees have started and grown about 2 feet already in their first six weeks of new life—and promise to be back in bearing in three to five years.

"We will select the most likely leader in each tree and dwarf the others to make a strong single trunk in another year or two. Meanwhile our 10,000 mature trees (mostly around 40 years old) were not hurt too seriously, and we expect 100,000 to 125,000 boxes of apples to be harvested—which is 80% of our normal output. We're higher than average though, due to the hillside location of our orchards, whereby air-drainage removes the worst of our frost menace."

## Midsummer Madness

By Sally E. Gray  
Hinckley, Maine

As I trimmed my borders  
And bees sang in the lilies,  
The wind twitched my apron.

I ran for the house,  
His thistledown feet close behind.  
Angered by the door slam

He donned his heavy boots  
And tramped in the garden.  
Oh, the poor pansies!

He shook the young maple  
Till she trembled in terror  
And he jeered through the keyhole.

After I shouted in frenzy:  
"Go away, Bad Boy Wind!"  
The silence was awful.

Address your "Windfalls" contributions to Henry Bailey Stevens, AMERICAN FRUIT GROWER, Willoughby, Ohio.

AUGUST, 1956



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Captan offers growers full season benefits such as eradication of secondary scab, effective control of fruit rots and other summer diseases of apples, peaches, cherries *right up to harvest*. Follow a Stauffer Captan spray schedule and reap the final benefit in bigger, finer fruit yields — plus extra storage life. You'll benefit next spring, too, from this year's season-long Captan program by increasing next year's fruit bud-set.

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## THE 1956 PEACH CROP

**Late season is throwing usual  
market supplies out of line**

**By M. J. DORSEY**  
*Secretary, National Peach Council*

THE annual peach supply normally starts in June with the early varieties from the southern states and lasts until into October in the northern tier of states such as Washington, Michigan, New York, and Ontario.

We have only three or four national peach varieties in spite of the fact that 40 or so can be purchased on the market. The earliest of the four is Redhaven, followed closely by Golden Jubilee. Then comes Halehaven and finally Elberta.

The earliest part of the peach volume coming from the South is made up of such varieties as Cardinal, Hiland, Dixired, Red Bird, Erly-Red-Fre, Coronet, Dixigem, Redhaven, and Golden Jubilee. When the Elberta movement starts in the South, the first week of July, the supply of that variety is continuous throughout the season until the harvest is over in the northern producing states.

### Competing Volume

I have just completed summaries for the June, July, August, and September supply. There are some interesting instances in sight of competing volume. For instance, Burbank July Elberta comes on about the same time in California this year as it does in Arkansas.

The eastern ripening period this year, generally, seems to be scheduled for a week to 10 days late. This throws the usual volume to be handled in the market out of line as com-

The 1956 peach crop is forecast by the USDA at 64,412,000 bushels — 24% larger than last year and 4% larger than the 1954 crop but 4% smaller than average. A fair-sized crop in the southern states accounts for most of the increase over last year. In 1955 the South had no crop, due to spring freezes.

pared with the normal ripening period. For instance, in states like Georgia, Elberta is scheduled to start about the middle of the month, which throws the heavy Elberta volume from Georgia, South Carolina, and North Carolina into a fairly heavy continuous supply.

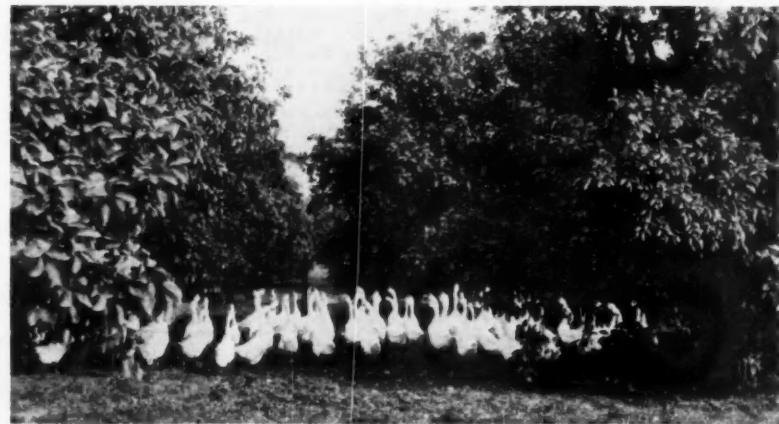
Elberta, however, this year is scheduled to start in California close upon the heels of the North Carolina supply. This variety will continue in heavy volume with the Virginia, West Virginia, Maryland, and Pennsylvania supply.

The Michigan, New York, and Ohio Elberta crop will start this year, as matters stand in mid-July, in early September. Ontario comes into the picture the latter part of September.

The rather heavy volume of Halehaven coming on the market the latter part of August is in direct competition with the Elberta volume from states immediately to the South, such as Indiana, Illinois, and the Virginias.

The ripening dates of our principal commercial varieties vary from season to season, which has a direct bearing upon the marketing job from the different producing centers. The last late season we had was in 1947, when the eastern production came on two or more weeks later than normal.

THE END.



### FEATHERED CULTIVATORS

Geese are a whiz at cultivating in the citrus orchard of W. L. Bradbury, Mercedes, Tex. Before buying the geese, the orchard was overrun by Johnson grass. Now there's not a sprig of Johnson grass in the entire orchard. Bradbury sells a few geese occasionally to take care of the feed bill, has found that the flock has cut labor costs of weed control considerably.—A. B. Kennedy.



NOW that the month of August is upon us, strawberry people will again talk about late summer or fall planting of strawberries. Well, what about it? Is this an old-fashioned notion or a new-fangled one? Can it ever pay out on a commercial scale?

Practical answers to these questions must be hedged by the commercial availability of planting stock. Nursery rows in most parts of the country are still a long way from being ready to dig, and potted plants, ideal to set now, are hard to come by and enormously expensive.

Those who grow their own plants can reset new beds easily and successfully, moving each plant with a good ball of soil around the roots. This results in little, if any, setback in plant growth and a fairly good crop the following spring. However, this activity is now limited to those who can afford to putter and is not generally suited to commercial practice.

#### Fall Setting of Stored Plants

In field testing numerous cold storage methods of spring-dug strawberry plants, a new possibility involving August or fall setting on a commercial scale comes to light. It looks as if such stored plants of certain June-bearing varieties may be set out in late summer or early fall in a three-row bed for hill system cultivation and actually yield a small fruit crop within forty days of setting, plus a second fair crop of fruit the following spring from the same plants!

Having this much to go on, we are in for endless cultural and varietal experiments plus critical exploration of the economics of producing strawberries as a quickie truck crop to follow peas, green beans, spinach, or some other early vegetable. The problem to overcome is the terrible labor cost of controlling weeds and runners over a year-long growing season. Plants set in August on cultivated ground treated with a pre-emergence weed spray, mulched adequately for winter protection, and harvested and plowed down the following spring before weeds and runners become a problem might result in an entirely new and highly profitable strawberry enterprise.—Robin Wyld.

AUGUST, 1956

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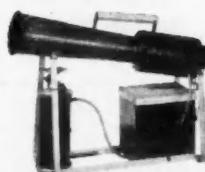
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## STATE NEWS

(Continued from page 14)

however, most growers had a successful season. Jerseyhelle looks promising. Virus-free Catskill produced heavy yields and may again become important.

**Due to the cool June weather, more peach varieties will ripen together than usual. Mildew and bacterial leaf spot diseases are more prevalent this year than in 1955. Mildew is most severe on Goldeneast and Rio Oso Gem.**

The May 24 freeze reduced the apple crop in most areas, with several growers suffering from 25% to 50% loss. A few growers report the loss of their entire crop.—*Ernest G. Christ, Sec'y, New Brunswick,*

### Orchard Day A Success

**ILLINOIS**—The 4th annual summer orchard day at the Lester Stone farm in East Moline was attended by 325 people. The program was built around exhibits and demonstrations of the latest equipment and supplies from 18 firms. Featured speaker was Paul Stark, Jr., of Stark Bro's. Nurseries, who discussed dwarf orchards and the future development of dwarf stock. A tour of Stone's dwarf apple orchard provoked much speculation as to the dwarf orchard's place in future apple plantings in the state.

**Miss Jean Myers, Illinois fruit queen, will open the Illinois booth at the State Fair where fresh tree-ripened peaches will be available. (There is nothing so delectable on a hot August day as a chilled tree-ripened peach!—Ed.)—*H. J. Hartley, Sec'y, Carbondale.***

### Dry Spring

**IOWA**—Rain has been spotty in most parts of the state and a good general rain is needed. The set is light. Some orchards report fire blight and red spider; however, no scab is reported.

Growers will be exhibiting their fruits at the Iowa State Fair in Des Moines August 23-September 2.—*R. Glenn Raines, Sec'y, Des Moines.*

### Top Crop

**INDIANA**—One of the best apple and peach crops in years is expected. Apple scab was not a serious problem. A number of growers experienced little or no effects from chemical thinning sprays. Frequent and heavy rains plus lack of effective chemical thinning may boost the June guestimate of 1,250,000 another 100,000 bushels.—*G. A. Adrian, Sec'y, Indianapolis.*

### Co-op Marketing

**CONNECTICUT**—Apple growers of this state are becoming increasingly marketing conscious. Fruit Day at the university combined its recent program with that of the N. Y. & N. E. Apple Institute. Carroll Miller of Appalachian Apple Service, and David Ring of Hudson Valley, urged growers to use co-operative effort in selling.

Annual crop estimate taken at the meeting showed a crop of over a million bushels. There are a lot of apples in Connecticut this year. Peach and pear crops of 34,800 and 13,000 bushels, respectively, are about the same as in 1955.—*Sherman P. Hollister, Sec'y, Storrs.*

### Optimistic Outlook

**MARYLAND**—With reduced crops, peaches and apples show every sign of being in good condition and there is optimism among growers that the final product of our orchards will be of good quality with the price in line with the quality. Local hail storms have been mostly centered on individual orchards. Growers have done a

## CALENDAR OF COMING MEETINGS & EXHIBITS

**Aug. 13-15**—International Apple Association 62nd annual convention, Dinkler Plaza Hotel, Atlanta, Ga.—Fred W. Burrows, Exec. Vice-Pres., 1302 18th St. N.W., Washington 6, D.C.

**Aug. 14-15**—Ohio Pesticide Institute annual meeting, Ohio Agricultural Experiment Station, Wooster.—J. D. Wilson, Sec'y, Wooster.

**Aug. 16**—Thirty-fourth annual Orchard Day, Ohio Experiment Station, Wooster.—C. W. Ellwood, Sec'y, Wooster.

**Aug. 16-25**—Annual Pennsylvania Peach Week. Peach queen will be selected Aug. 18 at York.

**Aug. 17-25**—The 10th International Congress of Entomology, McGill University and University of Montreal, Montreal, Canada.—R. Wick Moore, Science Service Bldg., Carling Ave., Ottawa.

**Aug. 29-31**—Northern Nut Growers Association annual meeting, Connecticut Agricultural Experiment Station, New Haven.—Spencer B. Chase, Sec'y, 2338 Parkview Ave., Knoxville, Tenn.

**Sept. 1-8**—Oregon Land Products Show, Salem.

**Sept. 23-26**—Produce Packaging Association 6th annual conference and exposition, Hotel Fontainebleau, Miami Beach, Fla.—Robert A. Cooper, Sec'y, 500 Fifth Ave., New York 36.

**Sept. 27-29**—Florida Fruit and Vegetable Association annual convention, Hotel Fontainebleau, Miami Beach, Fla.—Assn. Headquarters: 4401 E. Colonial Dr., Orlando.

**Sept. 29-30**—La Crescent, Minn., annual apple festival.

**Oct. 8-10**—Texas Citrus and Vegetable Growers and Shippers 14th annual convention, Plaza Hotel, San Antonio.—E. Anson, Exec. Mgr., 306 E. Jackson, Harlingen.

**Oct. 12-13**—Second annual West Virginia Black Walnut Festival, Spencer.—Herb Riggles, County Agent, Spencer.

**Oct. 25-Nov. 3**—National Apple Week. Norbert Eshmeyer, Sec'y, 1302 18th St. N.W., Washington 6, D.C.

**Oct. 29-30**—Minnesota and western Wisconsin fruit growers annual meeting, Winona, Minn.—Thomas T. Aamodt, Minnesota Dept. of Agriculture.

**Nov. 1-2**—Western Growers Association annual convention, Sheraton-Palace Hotel, San Francisco, Calif.—Headquarters, 606 S. Hill St., Los Angeles 14.

**Nov. 26-28**—Illinois State Horticultural Society and Illinois Fruit Council annual meeting, Abraham Lincoln Hotel, Springfield.—Harold J. Hartley, Sec'y, Carbondale.

**Dec. 2-4**—New Jersey State Horticultural Society annual meeting, Atlantic City.—Ernest G. Christ, Sec'y, New Brunswick.

**Dec. 6-7**—Oregon State Horticultural Society 71st annual meeting, Oregon State College, Corvallis.—C. O. Rawlings, Sec'y, Corvallis.

**Dec. 14-15**—Western Colorado Horticultural Society annual meeting, Mesa College, Grand Junction.—Raleigh B. Flanders, Sec'y, Box 478, Grand Junction.

fine job of controlling mildew on apples, using sulfur sprays earlier, followed by Karathane.—A. F. Vietheller, Sec'y, College Park.

### McIntosh Crop Looks Good

**VERMONT**—Many orchards are indicating a better than expected crop of McIntosh. Cortland and Delicious are very light, however, due to a light bloom and frost thinning. Scab and insect control have been excellent thus far and tree growth has been fast and vigorous.—C. L. Calahan, Sec'y, Burlington.

### Raspberries Injured

**OREGON**—Hot suns in early July dried up raspberries that processors had planned to use for freezing. The heat wave did a little damage to Boysenberries, and some late strawberry acres finished up just a bit ahead of schedule.—Harold and Lillie Larson.

# PINWHEELS and FIRECRACKERS

How good are the new birdscarers?  
Are they better than scarecrows?  
Here's one expert's evaluation

By WILLIAM D. FITZWATER

U.S. Fish and Wildlife Service

THE good that birds do fruit growers by preying on insect pests is sometimes offset by the damage they cause to crops.

Fortunately, the losses are not consistently high from year to year and often can be minimized by intelligent use of bird-control measures. Materials and methods available for control are by no means a "cure-all" for this problem, but they can help substantially.

Mechanical protection by bagging clusters of fruits or by screening individual trees or beds with cheesecloth or metal screen may serve to protect fruits around the home, but such measures are clearly impractical for the commercial grower. Instead, he usually has to rely on some form of frightening device.

Success or failure of frightening materials depends considerably upon the way in which they are used. For effective protection the equipment must be installed early in the season and maintained until the harvest is over. Once the birds have established the habit of feeding upon a certain crop in a particular place, they are much more difficult to control. Scare devices need to be in operation not only early in the season but also at any and all times that feeding is likely to occur, including early morning and late evening.

## Placing the Birdscarers

Variations in placement and in combinations of scare devices are necessary. With the possible exception of sound-makers, the materials should be displayed just above the plants so they will be seen readily as the birds come to feed.

The scare devices need to be moved about during the danger period to avoid having the birds become accustomed to them. Also, there is likely to be greater success if more than one kind of frightening material is used.

Combinations of different types of deterrents, such as noisemakers and twirling metal streamers have an advantage in that they simultaneously

produce fright in the bird through two of its senses, hearing and sight.

Many scare materials that are available commercially\* or are of the home-made type will work effectively if used properly. Even the familiar scarecrow in the cornfield will keep birds away if enough of them are used and they are moved around occasionally. However, less elaborate materials such as rag streamers or fluttering metal pinwheels are usually more effective than straw-stuffed replicas of the handyman or sections of hose that are supposed to remind the birds of snakes. After harvest, the control fixtures and devices should be removed and stored.

## Birds in the Vineyard

One of the principal fruit crops harmed by birds—grapes—has been protected effectively from some species by placing diluted Tanglefoot on top of posts that support the vines and by attaching wrapping paper to the posts or to the ground in such manner that it will flutter and make a disturbing noise in the breeze. Waxed meat-wrapping paper has worked well for the latter purpose.

Finally, it must be recognized that each local problem has its peculiarities that need to be considered; there is no magic formula that will prevent all bird damage in all places. And, to a considerable degree, success or failure depends on the individual grower, particularly on his diligence and ingenuity in applying deterrent measures.

THE END.

## SWEET CHERRY YIELDS

WHEN and how much will sweet cherries yield?

Fruit specialists at the New York (Geneva) Experiment Station say the answer depends on a good many factors, including variety, age of tree, climate, bird destruction, fertilization, cultivation, spraying, pruning, etc.

"Sweet cherry trees frequently produce their first fruits after they have been set in the orchard for three to four years, but there may be only a dozen fruits on each tree," the specialists explain. Under good cultural conditions, 15-year-old trees might be expected to produce an average of 75 to 100 quarts of fruit per tree.

\*A list of bird-control devices and their manufacturers can be obtained by writing to the U. S. Fish & Wildlife Service, Agricultural Hall, Purdue University, West Lafayette, Ind.

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## NO MORE TOSSED BOXES

Fork-lifts, pallets eliminate high stacking and bruised peaches

By RAYMOND COPPOCK

A BIG step forward in mechanical handling of peaches in the orchard has enabled a Merced County, California, grower to 1) practically eliminate the problem of bruised fruit; 2) slash his hauling and loading costs about one-third; and 3) make things a lot easier for his workers.

Here is how Forest Fiorini, of Delhi, who is well into his third



Fiorini finds it's easy to look into top box of load, which means boxes aren't stacked so high that they need to be tossed. Thus bruising of fruit is avoided.

season of using the system, accomplishes the apparently impossible:

Instead of hauling boxes of peaches from the orchard on trucks or trailers, Fiorini sends tractors equipped with fork-lifts and pallets directly into the orchard. In an average day one driver doing his own loading can haul out 1,000 boxes of peaches, besides handling his own empties.

### Peaches Go to Processor

What's the advantage? The first answer Fiorini gives to this question is fruit quality. As every peach grower knows to his sorrow, few fruits are more delicate than a ripe freestone peach. And Fiorini, with 50 of his 90 acres of peaches in freestones, sells entirely to the cannery and so must handle mature fruit.



Metal framework clamps down hydraulically on 42-box load, preventing spills. This load of peaches will remain undisturbed on pallet until it reaches the cannery. Note highest box is no higher than tractor driver Alvin Cherry's head.

"For years the problem of bruised fruit got worse and worse," he recalls. "It takes a good man to heave boxes of peaches up to the top of a wagonload without bouncing and bruising the fruit, and there just aren't many of those men around."

The fork-lifts solved this problem in two ways. First, boxes are never piled higher than seven above ground level, so there's no need to toss them. Second, boxes are handled only once, to stack them on the pallet held by the fork-lift. From then on, all moving is done by pallet and individual boxes aren't disturbed.

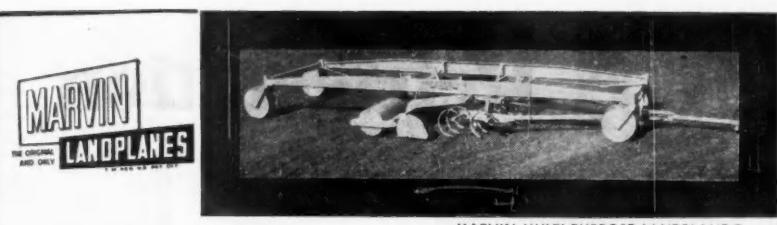
#### No Bruised Peaches

"The first year we tried this, in 1952, we asked the cannery to check our fruit quality. They reported that they could tell exactly when our fruit came down the belt simply because it wasn't bruised. That means more cases per ton for them, and they're giving us a special price because of it," says Fiorini.

The second big advantage is in lower labor costs and better work-



Fiorini also uses his fork-lift trucks in bulk harvesting his yearly grape crop totaling 1,500 tons.



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ing conditions. Fiorini's estimate of one-third saved on hauling and loading costs includes depreciation on the special equipment.

Machinery cost is spread over a larger area by another harvesting idea tried by Fiorini last year: use of fork-lifts and metal tanks for bulk harvesting of grapes. Half a dozen or more Merced County grape growers are now harvesting in bulk, in one way or another, and the practice seems to be catching on—again, because of drastic savings in labor costs.

In peaches, as in grapes, use of the fork-lifts eliminates a lot of back-breaking work handling boxes. "When we were using trailers," Fiorini comments, "it often took us 11 to 12 hours a day of hauling boxes to keep up with the pickers. The swimmers would be beat at the end of the day—and very often they didn't show up the next morning."

Today, an ordinary day's picking can be handled in nine hours, and there's a lot less hard work involved. Good men are now easier to get and keep, too.

#### Fork-Lifts Speed Handling

Using this system and four fork-lifts, Fiorini's crew can haul 880 boxes—a full truckload—out of the orchard and have the driver on his



way to the cannery in an hour. If the peaches are coming off in a rush and a driver's average of 1,000 boxes a day isn't enough, the process can be speeded by assigning a loader to each machine.

After expanding his system gradually—two fork-lifts the first year, three last year, and now four—Fiorini has said goodbye to trailers for good. He expects to handle about 1,000 tons of peaches and 1,500 tons of grapes a year with his present equipment.

THE END



## Refrigeration

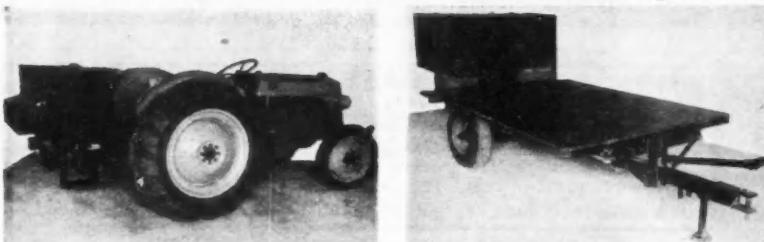


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## PEACH BORERS



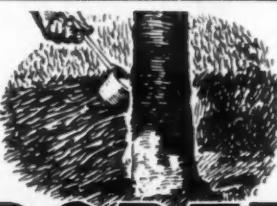
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### Attractive and They Sell

Eye appeal is what sells your fruit to the housewife. In an attractive package your fruit has twice the eye appeal and your sales are greater. The new bag at right is being used most successfully in Missouri. Milprint artists will help design a bag for you and give your fruit greater eye appeal. Why not write Milprint, Inc., 4200 N. Holton St., Milwaukee 1, Wis.



### Fits Any Opening



At long last there is available a gate which is inexpensive, easily assembled, and designed to fit any opening. The new gate is quickly installed without welding; made of steel, it is lighter than comparable aluminum gates and much stronger. Why not write Ed Kyle, Cleveland Hardware & Forging Co., 3270 E. 79th St., Cleveland, Ohio, for details.

- New Packages for Fall
- Do-It-Yourself Gate

### Fanci-Pak



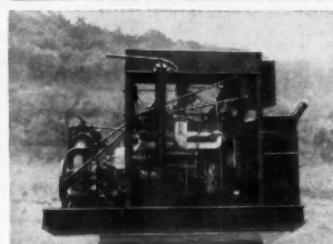
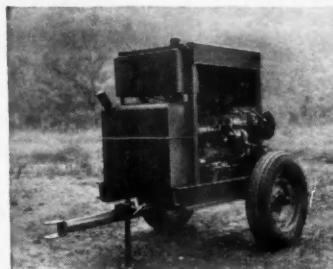
One of the biggest orchards in the East won the Folding Paper Box Association's merit award. The box used by Trexler orchards, Allentown, Pa., was the Fanci-Pak made by Alford Cartons. The new, yet tested Fanci-Pak provides protection and eye appeal. The photo above shows the merit award being given to Ed Necker of Trexler Farms by Bob Allison of Alford Cartons. Get Fanci-Pak details by writing Paul Ames, Alford Cartons, Ridgefield Park, N. J.

### See Like an Owl



Many growers like to spray or dust at night when the air is calm. Growers who do night work tell us of the importance of a handy wide-beamed lantern. The one which does the job best is pictured above. The new Radar-Lite is inexpensive and equipped with a two-in-one long life battery. The chimney is unbreakable and the entire unit is made for long, trouble-free orchard use. See your dealer or write Bill Riddell, Burgess Battery Co., Freeport, Ill.

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Name \_\_\_\_\_

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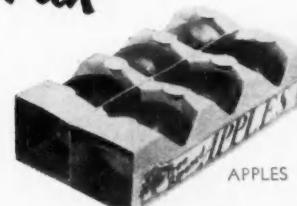
Water Source \_\_\_\_\_ No. Acres \_\_\_\_\_

Irrigation Division

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CONSHOHOCKEN, PA.

*Join the Modern Swing to*

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Thoroughly market-tested, —now demanded by food market operators who want less waste, more sales, faster check-outs. A selling carton you can put thru a hydro-cooler. Low cost. Available in several sizes, to hold 6, 8, or 10 pieces of fruit.

*Ask us now*

**Alford**  
*Cartons*

RIDGEFIELD PARK, N. J.

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Only 25c a word for one-time insertion; 20c a word for two-time insertion; 15c a word for four-time insertion—CASH WITH ORDER. Count each initial and whole number as one word. Copy must be in the first of the month preceding date of issue. Address: AMERICAN FRUIT GROWER, Willoughby, Ohio.

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NEW PLASTIC MENDING TAPE, JUST press on! Repairs clothing instantly. Lightning seller. Samples sent on trial. KRISTEE CO., Dept. 101, Akron 8, Ohio.

RUN SPARE-TIME GREETING CARD AND Gift Shop at home. Show friends samples of our new 1956 Christmas and All-Occasion Greeting Cards and Gifts. Take their orders and earn to 100% profit. No experience necessary. Costs nothing to try. Write today for samples on approval. REGAL GREETINGS, Dept. 4, Ferndale, Michigan.

### BUSINESS OPPORTUNITIES

GROW MUSHROOMS. CELLAR, SHED, Spare, full time, year round. We pay \$3.50 lb. We paid John Betts \$7,977.76, he started as amateur. FREE BOOK, MUSHROOMS, Dept. 127, 2954 Admiral Way, Seattle, Wash.

### FARM MACHINERY

BUY SURPLUS FARM TOOLS, MACHINERY, feed, jeep, tractor, hundreds others direct from US Government at tremendous savings. List \$1.00. BOX 169 AAG, East Hartford 8, Conn.

### FOR SALE—EQUIPMENT AND SUPPLIES

CIDER & WINE PRESSES, HAND AND HYDRAULIC, new and rebuilt. Repairs and supplies, clarifiers and filters, pasteurizers and bottling equipment. Write for supply catalogue. W. G. RUNKLES' MACHINERY CO., 185 Oakland St., Trenton, N.J.

1955 MODEL 36 SPEED SPRAYER, 1953 Model 36 Speed Sprayer, Bean Model 48, Speed-Air Grader, 400 Gal. Myers P.T.O., Rolomulcher, Cleaner, 20,000. New and used crates. CORY ORCHARDS, Cory, Indiana.

FRUIT GRAIDERS AT BARGAIN PRICES. Inquire GREGORY'S ORCHARD SUPPLY CO., Alma, Illinois.

5,000 OWOSO CRATES IN GOOD CONDITION. I cutticer nearly new. HAROLD WITT, Wixom, Michigan.

CIDER PRESS—MOUNT GILEAD 20 x 20 complete, in Number One condition. Need larger machine. Will trade or purchase 36 x 36 size. Must be recent model. JOHN BELL, Barrington, Illinois.

CIDER PRESSES, FROM ROADSIDE STAND size to large Presses for Vinegar stock. Filters, Pasteurizer, Filters, Tanks. Also Canning and Frozen Food equipment, used and new. Consult us if starting in business or enlarging. OTTO W. CUVIER, Webster, New York.

GOOD USED FARM CONTAINERS—SPLINT handle baskets, bushels, boxes, hampers, bags, nailed and wirebound crates. Truckload or carloads. Call or write ZELVY BROS. CONTAINER CO., 2005 Orange Ave., Cleveland, Ohio.

### MISCELLANEOUS

BERRY BOOK: "THIRTY YEARS OF BERRIES." Raspberries and Strawberries. 84 pages, price \$1.00 prepaid. ROY TURNER, 315 Livingston St., Peoria, Ill.

HAVE YOUR OWN AIR CONDITIONED cold storage. Consult experienced engineering concern specializing in Fruit Storages. Postal card reply. INDUSTRIAL ENGINEERING CO., 67 Hurlburt Ave., Akron 3, Ohio.

PRIMITIVE OZARK HONEY: RICH RED, heavy body, well ripened. In five pound pails, \$2.15, free on board. Allow postage for six pounds and 5¢ fee for insured delivery. L. C. WARTH, Van Buren, Missouri.

PRICES TOO HIGH? BUY NATIONALLY advertised products at wholesale prices. Send 25c stamp or coin for catalog and free sample razor blades. SPORTS PRODUCTS, Box 122, Bristol 17, Pennsylvania.

IRRIGATION, "PORT-ALUM" COUPLERS. Engineers have 8 years practical experience. "A Gentle Rain, Not a Downpour". Few dealerships open. In Ohio and nearby, write T. D. ROMIG, Carey, Ohio or "PAISO", Coshocton, Ohio.

WANTED: ENGLISH LAVENDER, WRITE LENORA WELCHLEN, LeRoy, Illinois.

LETTERHEADS, ENVELOPES, CARDS, Tags, Statements, Invoices, Purchase Orders. REGAL PRESS, Crooksville, Ohio.

CHEESE CLOTH—PROTECT YOUR BERRY crops. 100 yards by 52" in convenient 10-yard lengths. \$6.50 prepaid. Remit MIDCITY, 138 East 34th Street, New York, New York.

## THE QUESTION BOX

Don't be perplexed! Send us your questions—no matter how big or small. A three-cent stamp will bring you an early reply. Address: The Question Box, AMERICAN FRUIT GROWER, Willoughby, Ohio.

### FRUIT FLY CONTROL

What can I use to keep fruit flies away from my roadside market?—Michigan.

Spray the benches, walls, eaves, posts, and doors with a solution of 3 tablespoonsfuls of 25% wettable powder malathion in one gallon of water. Two or three baskets containing some overripe grapes, peaches, melon rinds, or any convenient fruit debris sprayed with the malathion mixture and exposed in the market at night or in some out-of-sight place around the market during the daytime will help kill off the flies.

### BLIGHT CONTROL

Is there a bulletin which tells how to control blight on pear trees?—Ohio.

The USDA has a leaflet entitled "Blight of Pears, Apples and Quinces" which can be obtained by writing to the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. Ask for Leaflet No. 187 and include 5 cents in coin, not stamps.

### MAGGOT TRAP



What can I do to trap maggots that are infesting my orchard?—Connecticut.

There are two kinds of traps used by the experiment station in New Haven. One is a ground cage consisting of a 3-inch by 3-foot by 3-foot wooden tray covered with one half inch hardware cloth on the bottom and a screen cage about 8 inches in height and 3 feet square, the same as the tray. The tray is placed under a tree in the fall and loaded with several bushels of maggoty apples. After the maggots have entered the soil, the apples are removed and the tray left in position until spring, when it is replaced with the square screen cage which can then be watched for fly emergence.

The second type of trap is the so-called "McPhail" trap, shown in the photo. This is provided with 10% ammonium acetate and hung on the south side of the tree—preferably among apples and leaves. The flies light on the glass bottle and crawl up through the central spout, becoming trapped in the liquid which it contains.

### QUACK GRASS IN CURRENTS

Can you tell me how to get rid of quack grass in currants?—Illinois.

Curraints are resistant to Chloro-IPC and Dr. R. F. Carlson, of Michigan State University, suggests you use this material at about 8 pounds per acre, which is equivalent to 2 gallons per acre.

AMERICAN FRUIT GROWER

## Are YOU a Nursery Salesman?

Add to your income by selling AMERICAN FRUIT GROWER. It's a logical combination, for AMERICAN FRUIT GROWER will help your customers get the best results from the nursery stock you sell them.

Write today for our liberal, nursery agents' plan. Address:

EDWARD MEISTER, Circulation Manager

## AMERICAN FRUIT GROWER

Willoughby, Ohio

## 'WE GOT RID OF OUR BASKETS'

(Continued from page 9)

basket is more rigid than the 16-quart, and will hold up for several years in the orchard, says Mengel.

### Minimum Handling

A modern packing house and 60,000-bushel cold storage was built and used for the first time in 1947. Two years ago the packing house was redesigned, in the interest of better peach handling. The apple grader was moved to the rear and the peach machine brought up front. The dump is right next to the door, and as the trucks come in with the  $\frac{5}{8}$  baskets from the orchard, the peaches are not handled other than for dumping.

Ontelaunee's crew of mechanics has taken many of the rises and falls out of the grading table and sizer. Two inches of drop were taken off the Burke sizer, for example.

After brushing and grading, the peaches are placed by hand in corrugated tray-pak cartons made by Fort Wayne Corrugated Paper Company, Fort Wayne, Ind. These have three trays and hold 60% of a bushel. Ontelaunee also uses the Fort Wayne 25-pound corrugated carton.

As soon as the peaches are packed, they go into cold storage for precooling before going to market.

## BYRD APPLES AND MRS. HOUSEWIFE

(Continued from page 11)

tions was instituted. This program told the Byrd story in simple language at more receptive times to all dealers in the area. It accomplished something else—it added prestige to the brand—"the advertised brand!"

Still, this was not enough. All of the fine talk of the field representative and the printed word of the trade publications did not always make the sale.

Skipping the broker and jobber, the wholesaler has just one "boss"—the customer or better known as Mr. Grocer. Mr. Grocer has one boss—bless her—Mrs. Housewife. One request from Mrs. Housewife to the grocer who in turn transmits it to the wholesaler is worth many, many hours of effort by the shipper. Hence a program of consumer advertising in the number one media for food, the newspaper, augmented by some radio and television schedules brought the Byrd story direct to Mrs. Housewife.

Point-of-sale advertising, recipe booklets, and various other forms of consumer advertising have not been neglected, even to truck-side posters telling the world that "here goes another load of Byrd apples."

Both oral and written comment bear evidence of the success of the

The corrugated carton was introduced in 1954 to cut trucking expenses. Ontelaunee trucks its peaches directly to big-city markets which may be 300 miles away.

In 1954, 7500 half-bushels were shipped in these cartons. In 1955, since many areas had no peaches, Ontelaunee realized that peaches would be high and that the best way to beat competition would be with an attractive pack. It shipped close to 20,000 of the cartons at prices ranging from \$1.75 to \$5.00.

### Safety Valve for Ripe Peaches

A roadside market at the packing house acts as a safety valve on the ripe peach deal. The market is located 9 miles north of Reading on Route 122, a heavily-traveled truck route. From 7000 to 8000 bushels of peaches are sold each year at very good prices through this roadside market—and they are ripe peaches, with better flavor than those shipped.

As Mengel puts it, "Sure, it costs us money to grow good fruit, but we are firmly convinced that the consumers will pay for good fruit. Our apples went along very nicely last year, but the peaches were the thing that kept us in business." THE END.

## 25 Estate Hemlock \$15.00

### Canadian Hemlock

just like those on large estates. Hardy New Hampshire grown, 18 to 24 inches. Special this month, 25 for \$15.00, 100 for \$50.00 or 500 for \$200.00. The shipment at any later date.

Bob McGuire

R.F.D. 5

Johnson City, Tenn.

## FREE BOOK of

BIG YIELD Dwarf Peach—Cherry—  
Apple—Pear Trees plus Ornamentals  
Shrubs, Shade Trees, Perennials, etc.

YOU'LL WANT these hardy Dwarf Fruit Trees for huge harvests from a small land area. Over a dozen varieties guaranteed to bear large juicy fruit within two years—

priced right, because you buy direct from the nursery and postpaid now for new FREE Catalog of hundreds of hardy fruit trees (dwarf and standard), grapes, berry plants, flowering shrubs, perennials, fast growing shade trees, etc. Write:



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NURSERIES  
Dept. AFG-8  
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PEACH TREES LOW AS  
APPLE 20c  
Cherries, Pears, Plums, Nectarines, Strawberries, Blueberries, Dwarf Fruit Trees, Grapevines 10c, shrubs, Evergreens, Shade Trees, Roses 25c up. Quality stock can't be sold lower. Write for FREE color catalog and \$2.00 FREE tree identification chart.  
TENNESSEE NURSERY CO., BOX 4, CLEVELAND, TENNESSEE

## NEOSHO NURSERIES CO.

Neosho, Mo.

Quality FREE  
Fruit Trees CATALOG

## T. B. West & Son

MAPLE BEND NURSERY  
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Also Dwarfs in the Popular Varieties

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## APPEACH Deluxe

Rigid frame, canvas covered bucket designed especially for peaches and early harvested apples. Excellent for other fruits. Stiff front stays protect against ladder. Top large enough for picker to lay fruit in carefully. Bottom is quick-release type.

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Flora Dale, Pa.

## Certified Cultivated Blueberry

10 BEARING AGE PLANTS • \$3.50

EARLY — MID SEASON — LATE

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Established 1900  
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OVER 50 YEARS EXPERIENCE GROWING FRUIT TREES FOR COMMERCIAL ORCHARDISTS.  
WRITE FOR CURRENT PRICE LIST

# American Fruit Grower

• Fruit for Health •

RICHARD T. MEISTER, *Editor*  
H. B. TUKEY, *Associate Editor*

## A Lion for a Pet

FRUIT growers who once welcomed real estate boomers and industrial site finders are now turning their backs on the developers. What's more, they're enacting zoning laws to keep their farms and orchards intact, reports the *Wall Street Journal* (May 9, 1956).

"Farmers around here used to wish that industry and people would move into this area from the city," says Charles S. Boyd, Santa Clara County, California, prune grower. "But now they've found it's like having a *lion for a pet*. What do you do with it when it grows up?"

The disease of spreading suburbia exists all over the country. Around Washington, D.C., in the last decade 129,000 acres of farmland have been covered by suburbia. Some 32,000 acres of irrigated farms around Phoenix, Ariz., have been turned into subdivisions since 1941.

"The desire for rural zoning is just awakening in many communities," says Edward B. Wilkens, director of planning services at Rutgers University.

Says Belford L. Seabrook, vice-president of big Seabrook Farm at Bridgeton, N.J., "Besides the economic advantages to the farmer, zoning promises far-reaching benefits to all the people."

The disease of spreading suburbia is especially acute in California. While there are 100 million acres of land in the state, about 80% of it is unfit for farming. At the same time, 90% of the state's population is centered in the eight counties containing half the 12.4 million acres suitable for general cultivation.

Santa Clara County, for example, produces half the U.S. prune crop and huge tonnages of sweet cherries, apricots, pears. Soil capability maps reveal that it abounds in Class I soil—the best for agricultural purposes. Yet the population of the county has doubled since 1950.

Ten California counties have enacted agricultural zoning ordinances. In Maryland, New Jersey, Utah, Delaware, Virginia, Pennsylvania, Ohio, Illinois, and other states similar efforts have been made on a smaller scale.

In Santa Clara County a zoning ordinance was enacted as a result of fruit growers' petitions. Six "greenbelts" totaling 6000 acres have been

zoned for exclusive agricultural use. Another 9000 is in a semigreenbelt status to prevent annexation by cities while legal action is pending.

What happens when suburbia begins creeping into a farming area? Some growers sell and either quit farming or start over on new land. Others stay, because their orchards represent a lifetime investment. Besides, good orchard land is expensive, costing from \$3500 to \$6000 an acre in California.

But operating an orchard in a suburb presents definite problems—and skyrocketing tax bills is the biggest one. A case in point is that of Edward Teresi and his father, who operate a 40-acre apricot, cherry, prune, and pear orchard surrounded by subdivisions in Santa Clara County. The tax valuation on their land has soared in four years from \$375 to \$600 an acre. With a 25% increase in tax rates, their tax bill has about doubled.

The ranch homes and factories bring other problems for growers. Poisonous sprays can't be used too close to a subdivision. Road grime and smog from factories damage the fruit. The water table has been greatly lowered in many sections. Thirty years ago, for example, grower Burt Leonard pumped 800 to 900 gpm's from a 65-foot well with a 20 h.p. electric pump. Today he can draw only 400 gpm's from a 300-foot well using a 75 h.p. pump.

Is farmland zoning the answer to the problem of America's disappearing farmlands? It appears to be one of the best solutions offered as yet.

## Fruit Growing is Such Fun!



## Fruit Talk

*A Horticulturist Abroad . . .*

THEY rightly call it the "Sub-continent of India"—a great beehive suspended from the land mass that is Asia and separated from it by the Himalayas, the highest and most majestic mountains in the world. The waters from the north still grind the rocks, sift the sands, and spread the silt out over the great food-growing deltas of the Indus to the west and the Ganges to the east.

Beautiful, lovely, interesting, exciting India—study in contrasts—riotous color and brown drabness—desert waste and overflowing abundance—humidities of 97% and 3%—all side by side in a fabulous region of 385 million people.

South of New Delhi some 80 miles is the agricultural college at Agra. A few minutes in the fields under a torrid sun, with relative humidity of 3 and a temperature of 109° is enough!

Near by is the Taj Mahal. The photographs and the word pictures have built some sort of imagery in your mind, but nothing can compare with the breath-taking sight of this rhapsody in loveliness. To be here on a moonlight night is to sit in reverent silence.

Northwest of Delhi, three hours by plane, is Lahore, West Pakistan. This is the Punjab immortalized in Rudyard Kipling's *Kim*. Punjab means "five rivers." Here is the greatest irrigation project in the world—26 million acres! To the northwest is the fruit district of Pashawar near the foot of the Khyber Pass. But fruit is in short supply.

Sixty miles away by automobile in the early morning, before the midday heat brings everything to a stop, is the well-known agricultural college at Lyallpur. All along the way thousands of native farmers and their wives and families are trudging to the village fields, lifting, cutting, pumping, digging, carrying—all by hand or with water buffalo. Signs of fruits and vegetables are few.

And now a dust storm and a trying night flight of over 1500 miles across India brings you to Dacca in East Pakistan, just 24 feet above sea level! Here on the great delta of the Ganges stretch rice and jute and agriculture for miles. Here is water in abundance and food for the millions. Mangoes, bananas, and other fruits can be grown.

Across the border is teeming Calcutta—great industrial and educational center. Dr. S. L. Krishnamurthi flies up 1500 miles from Annamalai University to tell of his success with combined applied research-teaching extension for the masses in the approved American land-grant college manner. Dr. K. L. Narisimham comes down from Sikkim State, where he is director of agriculture; and Dr. S. P. Parikh comes in from a near-by processing plant. Yes, teaching has its compensations when one sees his students taking places of leadership in the world!

Now out over the Bay of Bengal from Calcutta the plane climbs above the gigantic flat, green, life-giving delta until it reaches the Sea of Bengal, to level off for a pleasant three-hour flight down into Rangoon in Burma, at the mouth of the Irrawaddy River, to be greeted by friendly, religious Burmese people. —H. B. T.

*This is the second report from our associate editor, Dr. H. B. Tukey, on his trip to southeast Asia for the Atomic Energy Commission.*

## Coming Next Month

- Spray to Stop Fruit Drop.
- Is Your Grader Ready?
- How to Tell When to Pick Apples, Pears, Plums.
- Take Pride in Your Roadside Signs.



Polyethylene bags for "Seald-Sweet" and "Florigold" produce are supplied by **Shellmar-Betner Flexible Packaging Division** of Continental Can Co., Mt. Vernon, Ohio.

# Florida Citrus Exchange adopts polyethylene for prepackaging citrus at terminal level

Florida Citrus Exchange, large cooperative marketing organization, is going ahead on a big scale toward setting up their own terminal prepackaging operations in major marketing areas . . . and packaging their produce in polyethylene bags. Walter J. Page, director of public relations and merchandising reports:

"Use of these bags has increased sales everywhere. Good looks is a big help. The bag appears to be a premium because of its reuse value. As an advertising medium it is terrific as it is not thrown out."

One of the surest ways to increase and solidify markets and profits is to make sure that your produce is marketed in film made of BAKELITE Brand Polyethylene. Get the facts, and how-to-do-it help from your packaging supplier. Or write Dept. SP-73.

*It pays to package  
in film made of*



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**TOUGHEST BODY.** Only complete line of pickups with all-steel bodies, every one with center tailgate hinge. They are extra rigid and rugged, last longer — truly "grain-tight." Low loading height saves effort and time.

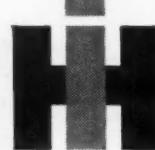
**EASY DRIVING AND RIDING.** With steering linkage *ahead* of the front axle, you can have easier, more positive control. This design permits shackling the front springs at the *rear* for a more comfortable ride and longer spring life.

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**FUNCTIONAL DESIGN, LASTING CONSTRUCTION.** More style, safety and comfort is yours in the attractive Comfo-Vision cab. And every component of every INTERNATIONAL is all-truck built to stay on your job longer, built to cut costs way down. There's more — see your INTERNATIONAL Dealer or Branch for complete facts and figures.

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